Host Sessions

This object is used to define and administrate host sessions.

You can define all settings for a session. These include the type of host session (e.g. Telnet TN3270) and many other properties that define the behavior of the session.

Note:
The standard 24x80 terminal screen model (model 2) is supported for all types of viewers. For the GUI viewers, no other terminal screen models are supported at this time. The Terminal Viewer, however, also supports the 3270 terminal models 3, 4 and 5.

Communication-specific properties are required to successfully open a host session. Therefore, these properties do not have default values. You must set them explicitly to allow the successful establishment of the session. Other session properties are predefined or carry default values.

You can define a number of different sessions. For each session, you can define different properties. Each session must have a different name.

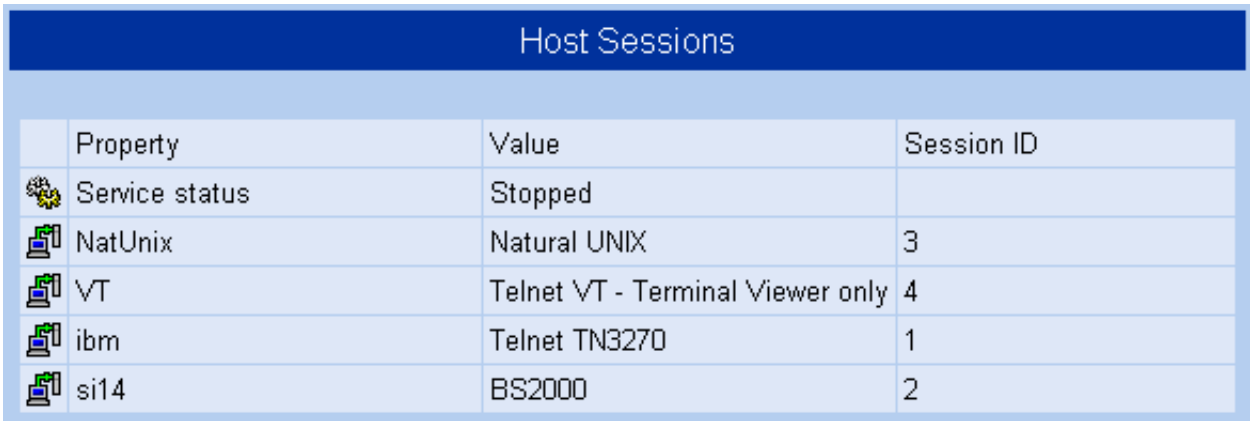
This chapter covers the following topics:

- Overview of Defined Host Sessions
- Adding a Session
- Updating a Session
- General Properties
- Communication Properties for Telnet TN3270
- Communication Properties for Telnet VT
- Communication Properties for BS2000
- Communication Properties for Natural UNIX
- Display Properties for Telnet TN3270
- Display Properties for Telnet VT
- Display Properties for BS2000
- Terminal Properties
- Terminal Viewer Properties
- Data Transfer Properties
- National Properties

See also: *Supported Communication Methods* in the *Installation and Configuration* documentation.

Overview of Defined Host Sessions

When you select the "Host Sessions" object in the tree-view frame, a list of all defined host sessions is shown in the detail-view frame.



Commands

When the Entire Screen Builder Server has been stopped, the following command buttons are available in the command frame:

Add Telnet TN3270 Session	Add a Telnet 3270 session.
Add BS2000 Session	Add a BS2000 session.
Add Natural UNIX Session	Add a Natural UNIX or Natural OpenVMS session.
Add Telnet VT Session	Add a Telnet VT session.

In addition to the above command buttons, the following command buttons are available when a host session is selected in the tree-view frame:

Copy Session	Copy the selected session. Specify a name in the resulting dialog and choose the **Save New Session** button.
Delete Session	Delete the selected session. You will be asked to confirm the deletion.

Adding a Session

It is only possible to add a session when the Entire Screen Builder Server has been stopped.

To add a session

1. Select the "Host Sessions" object in the tree-view frame.
2. Choose the **Add** button for the desired session type (e.g. **Add Telnet TN3270 Session**).
3. In the resulting dialog, specify all required properties (see the property descriptions below).
4. Choose the **Save New Session** button at the bottom of the detail-view frame.

Updating a Session

It is only possible to update a session when the Entire Screen Builder Server has been stopped.

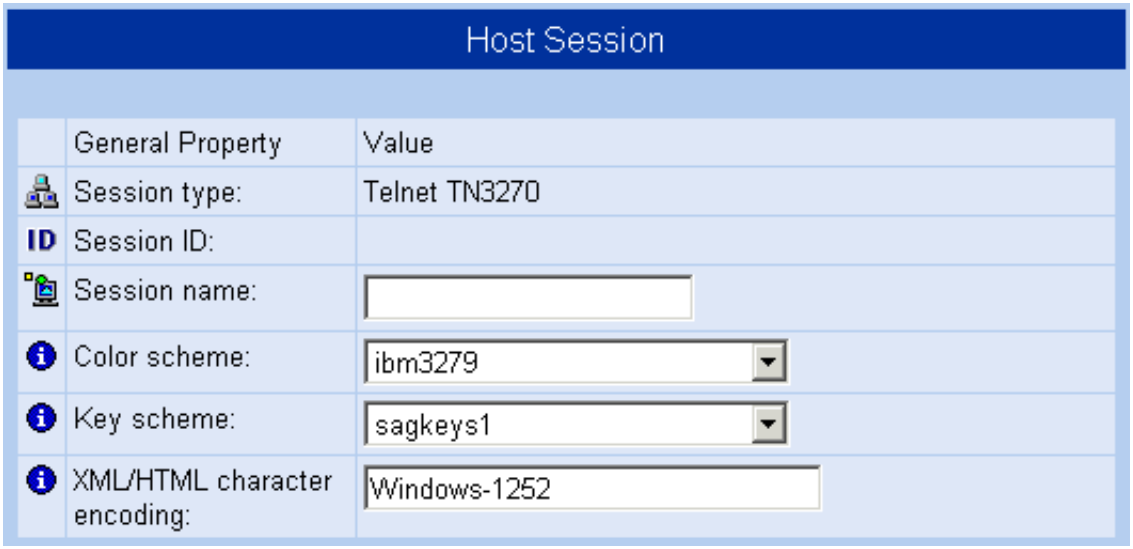
When the server is running, you can only view the properties. In this case, the values ON or OFF are shown instead of the check boxes that appear when updating.

To update a session

1. Select the desired session in the tree-view frame.
2. In the resulting dialog, modify all required properties (see the property descriptions below).
3. Choose the **Update Session** button at the bottom of the detail-view frame.

General Properties

These properties are valid for all session types.



Session type

Displays the session type. This property cannot be modified.

Session ID

Displays the session ID. This property cannot be modified. A session ID is automatically created for each host session that is added.

This session ID is used by the GUI viewers. It corresponds to the connection number property in the viewers. The viewer sends the session ID to the Entire Screen Builder Server with the connect request. The Entire Screen Builder Server then accesses the configuration file and uses the session ID as a key for getting the session properties (host name or host IP address, port number, etc.). The connection with the host is then established using the corresponding session properties.

Session name

The name that has been defined for this session. It may contain blanks.

Color scheme

Select the desired color scheme from this drop-down list box. See *Color Schemes* for further information.

Not available for Natural UNIX sessions.

Key scheme

Select the appropriate key scheme for the current session type from this drop-down list box. See *Key Schemes* for further information.

XML/HTML character encoding

When creating a new session, the character encoding from the server settings is used as a default.

Note:
This text box is blank for sessions that have been created with an earlier version of Entire Screen Builder. In this case, the default encoding from the server settings is used.

You can specify the encoding that is to be

- written to downloaded XML and HTML files (see below),
- used by the XML parser to interpret XML files correctly during upload,
- used by the XML Version.

Note:
The encoding is not used for the upload of HTML files.

For download, the encoding is written to the file exactly as it has been specified it in this text box (including all possible errors). The application that is used to open the downloaded file (for example, Internet Explorer or Excel) uses the defined character set for displaying the contents of the file. The contents of the file (letters, numbers, special characters) are not converted to another format. The encoding is written to the downloaded file as follows:

- **XML**
  The encoding is written to the encoding declaration which is part of the XML text declaration. Example:

  ```
  <?xml version="1.0" encoding="windows-1252"?>
  ```

  For further information on character encodings, see http://www.w3.org/TR/REC-xml#charencoding.

- **HTML**
  The encoding is written to the META declaration. Example:

  ```
  <meta http-equiv=Content-Type content="text/html; charset=windows-1252">
  ```

  For further information on character encodings, see http://www.w3.org/TR/html4/charset.html#h-5.2.

If a character encoding is not specified for a session, the encoding which is currently defined in the server settings is written to the encoding declaration (XML) or META declaration (HTML) during download.

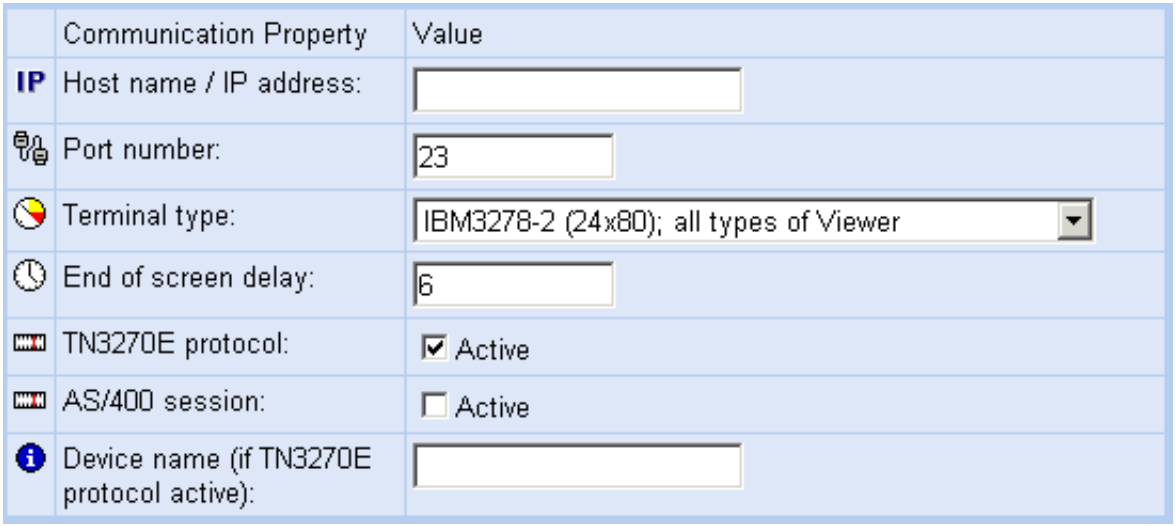
The following table lists some important character sets:

Character Set	Description
ISO-8859-1	ISO Latin 1
UTF-8	Unicode
windows-1250	Windows Central Europe
windows-1251	Windows Cyrillic
windows-1252	Windows Western Europe
windows-1253	Windows Greek
windows-1254	Windows Turkish
windows-1255	Windows Hebrew
windows-1256	Windows Arabic
windows-1257	Windows Baltic
windows-1258	Windows Vietnamese
windows-874	Windows Thai

Note:
The character encoding for data transfer with HTML and XML can be overwritten with the script file method `SetXMLEncoding`.

Communication Properties for Telnet TN3270

See also: *Telnet 3270(E)* in the *Installation and Configuration* documentation.



Host name / IP address

Specify the address of the host with which you want to communicate. The TCP/IP address format is w.x.y.z, where w, x, y and z are numbers which can have 1 to 3 digits. Example: 23.218.4.90.

Alternatively, if you have a name server installed in your network, you can specify the name of the host to which you want to connect.

Port number

Specify the desired port number. The TCP/IP port number must be the same as the Telnet port number defined on the host.

Terminal type

Select the desired terminal type from this drop-down list box. Available are the standard terminal types 3278 and 3279 and the enhanced terminal types 3278E and 3279E. All standard and enhanced terminal types are available with different screen sizes.

End of screen delay

This option only applies to line mode. It determines the length of time in tenths of a second that the viewer will delay before assuming that the screen is complete (end of screen). Valid input ranges from 0 to 30. This timer is reset each time data is transmitted from the mainframe. It is used to detect a logical end of screen, since no physical data signals the end of screen. If you specify an invalid value, the default value 6 is used.

TN3270E protocol

When this check box is selected, TN3270E is used for communication. A prerequisite is that the Telnet server is capable of processing TN3270E. Otherwise, the TN3270 protocol is used.

AS/400 session

For AS/400 hosts connected via Telnet 3270, PF keys require a leading PA key to be sent to the host in order to be recognized.

When this check box is selected, the session is defined as an AS/400 session. PF keys are then sent in AS/400 style. The PF keys PF1 through PF12 are sent as PA1+PF1 through PA1+PF12, and the PF keys PF13 through PF24 are sent as PA2+PF1 through PA2+PF12.

This applies to the following features:

- the basic rule Function Keys,
- the host communication method `SendKey` of the script language.
- the screen interface method `SendKey` of the user exits.

Note:
Entire Screen Builder provides a key scheme with a special layout for AS400 host systems. See *Key Schemes*.

Device name

Applies only when the **TN3270E protocol** check box has been selected. Specify one of the following:

- **Display LU name**
  When a display LU name has been specified, the Telnet server tries to open this specific LU session. If this LU is already used, an error message is shown.
- **Resource name**
  When a resource (e.g. an LU pool) has been specified, the Telnet server tries to open any LU from the specified LU pool.

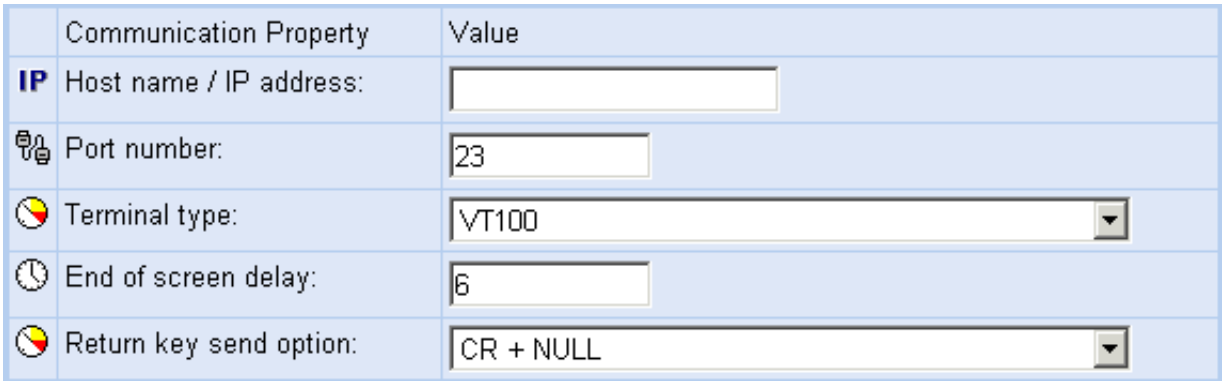
When you specify a name, the Telnet server uses this name to open a session with this LU name or a LU from a pool with this name. If no specific LU with this name and no LU pool with this name is defined on the Telnet server, an error message is shown.

When you leave this text box empty, a "generic" session is created. In this case, any generic display LU of the Telnet server is used. A prerequisite is that at least one generic session has been defined on the Telnet server.

Communication Properties for Telnet VT

This type of communication can only be used with the Terminal Viewer.

See also: *Telnet VT* in the *Installation and Configuration* documentation.



Host name / IP address

Specify the address of the host with which you want to communicate. The TCP/IP address format is w.x.y.z, where w, x, y and z are numbers which can have 1 to 3 digits. Example: 23.218.4.90.

Alternatively, if you have a name server installed in your network, you can specify the name of the host to which you want to connect.

Port number

Specify the desired port number. The TCP/IP port number must be the same as the Telnet port number defined on the host.

Terminal type

Select the desired terminal type from this drop-down list box.

End of screen delay

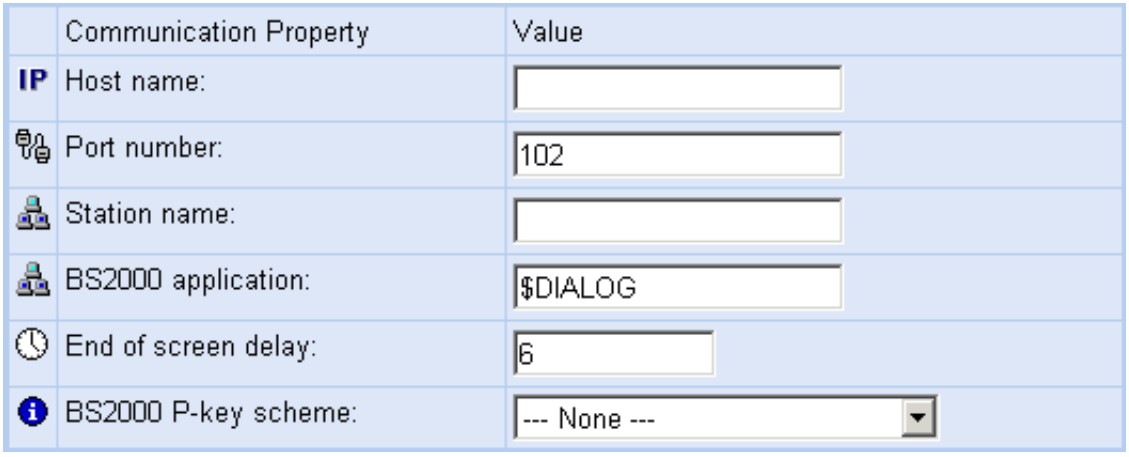
This option determines the length of time in tenths of a second that the viewer will delay before assuming that the screen is complete (end of screen). Valid input ranges from 0 to 30. This timer is reset each time data is transmitted from the mainframe. It is used to detect a logical end of screen, since no physical data signals the end of screen. If you specify an invalid value, the default value 6 is used.

Return key send option

Select the data from this drop-down list box that is to be send to the host when the return key is pressed.

Communication Properties for BS2000

See also: *BS2000 TCP/IP* in the *Installation and Configuration* documentation.



Host name

Specify the address of the host with which you want to communicate. The TCP/IP address format is w.x.y.z, where w, x, y and z are numbers which can have 1 to 3 digits. Example: 23.218.4.90.

Alternatively, if you have a name server installed in your network, you can specify the name of the host to which you want to connect.

Port number

Specify the desired port number. The TCP/IP port number must be the same as the port number defined on the host.

Station name

If you do not specify a station name, Entire Screen Builder automatically creates an internal name (e.g. STN1, STN2 etc.) when this session is opened. This is recommended if you want to establish several connections to the BS2000 host using the same host session.

Optional. You can also specify the name of the station which is used to connect to the host. The station name may include the following characters: A to Z, 0 to 9, $, # and @. The first character must not be a number. The name can be up to 8 characters long. When you specify a station name, only one host session with this name can be active. When this host session is opened once more, the previously opened host session is automatically closed.

When using station names, you should create several host sessions with different station names.

BS2000 application

Specify the name of the application on the BS2000 host to which you want to connect. $DIALOG is provided as the default name. The name can be up to 8 characters long. The connection will be established using an "open" command with no parameters.

If this field is empty, you are prompted for a BS2000 application name when you open the host session. You can then enter the "open" command followed by the application name (for example "o $DIALOG"). This is helpful if you want to use different BS2000 applications.

End of screen delay

This option only applies to unformatted screens. It determines the length of time in tenths of a second that the viewer will delay before assuming that the screen is complete (end of screen). Valid input ranges from 0 to 30. This timer is reset each time data is transmitted from the mainframe. It is used to detect a logical end of screen, since no physical data signals the end of screen. If you specify an invalid value, the default value 6 is used.

BS2000 P-key scheme

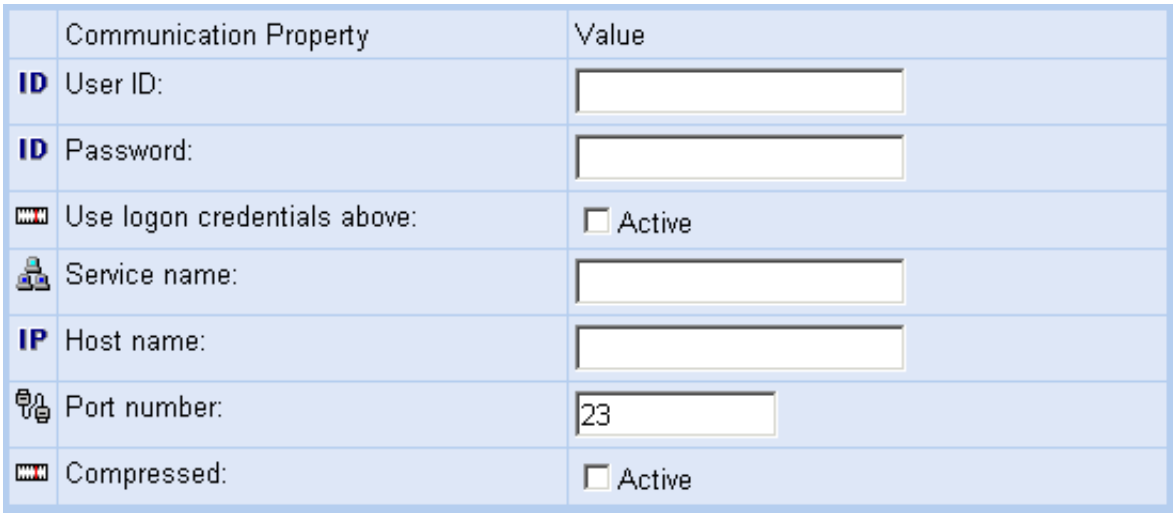
Select the desired P-key scheme from this drop-down list box. See *BS2000 P-Key Schemes* for further information.

When a P-key scheme has been defined, this P-key scheme is automatically loaded when a connection with the host is established.

Communication Properties for Natural UNIX

These communication properties apply to Natural UNIX and Natural OpenVMS hosts.

See also: *Natural UNIX* in the *Installation and Configuration* documentation.



User ID

Specify the user name that is to be used to log on to the system.

Password

Specify the password that is to be used to log on to the system.

Use logon credentials above

When this check box is selected, the above logon ID and password are used to log on to the system. See also: *Using the Viewers with Natural on UNIX and OpenVMS Hosts* in the *Installation and Configuration* documentation.

Service name

The service name must be the same as the service name defined on the host. See *Installing Natural for Entire Screen Builder on UNIX Hosts* in the *Installation and Configuration* documentation for further information.

Host name

Specify the address of the host with which you want to communicate. The TCP/IP address format is w.x.y.z, where w, x, y and z are numbers which can have 1 to 3 digits. Example: 23.218.4.90.

Alternatively, if you have a name server installed in your network, you can specify the name of the host to which you want to connect.

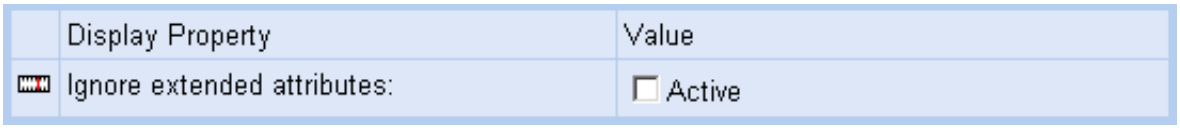
Port number

The TCP/IP port number must be the same as the port number defined on the host. See *Installing Natural for Entire Screen Builder on UNIX Hosts* in the *Installation and Configuration* documentation for further information.

Compressed

When this check box is selected, the compression method is enabled. This improves performance and reduces line load.

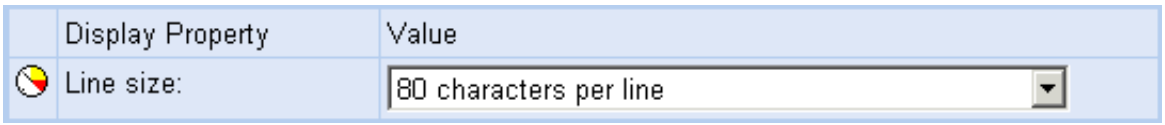
Display Properties for Telnet TN3270



Ignore extended attributes

When this check box is selected, the extended color attribute bytes sent by the host are ignored. This means that the colors are not taken from the data stream; only the field colors are used for display. Other extended attributes are displayed (e.g. blinking oder underlined).

Display Properties for Telnet VT



Line size

Specify whether 80 or 132 characters are to be displayed per line.

Display Properties for BS2000

Display NIL characters

When this check box is selected, the BS2000 NIL characters (dots) are shown instead of blanks.

Terminal Properties

These properties do not apply to the session type Natural UNIX.

	Terminal Property	Value
	Enable nonconversational writes:	Active
	Accept empty startup host screens:	Active

Enable nonconversational writes

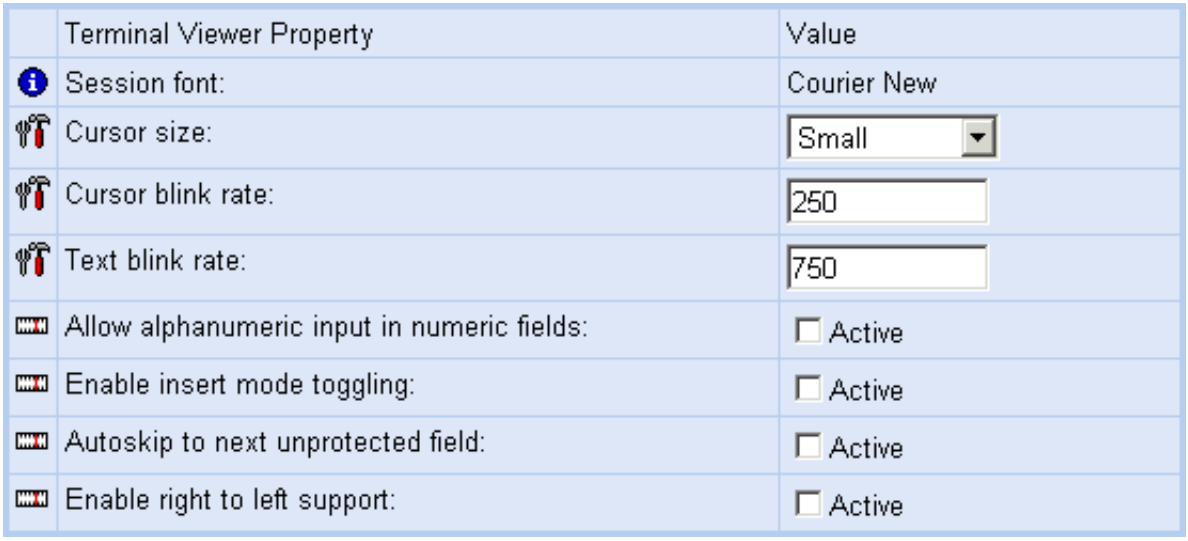
Normally, the viewer waits for a complete screen from the host and the keyboard unlock condition before displaying a new host screen. This avoids screen flickering. Some host applications, however, send screens to the terminal repetitively or without unlocking the keyboard. When this check box is selected, the viewer immediately displays every new screen it receives.

Accept empty startup host screens

Select this check box, if an empty startup screen causes a timeout during the initialization of the session.

Terminal Viewer Properties

These properties only apply to the Terminal Viewer.



Note:
The above screenshot applies to sessions of type Telnet TN3270.

Session font

Currently, a fixed TrueType font (Courier New) is used as the default for the client. The session font can be changed locally in the client. See *Modifying the Font for a Host Session* in the *Individial Session Settings* documentation.

Cursor size

Select the cursor size to be used for this session from the drop-down list box.

Cursor blink rate

Specify the cursor blink rate in milliseconds. Valid input ranges from 100 to 2000. If you specify an invalid value, the default value 250 is used.

Text blink rate

Specify the text blink rate in milliseconds. Valid input ranges from 100 to 2000. If you specify an invalid value, the default value 750 is used.

Allow alphanumeric input in numeric fields

Not available for sessions of type Telnet VT.

When this check box is selected, you can enter alphanumeric characters in numeric entry fields while in terminal emulation (for example, to enable you to enter plus or minus signs).

Enable insert mode toggling

Not available for sessions of type Telnet VT.

When this check box is selected, the INSERT key in terminal emulation mode acts like the INS key in other Windows applications (such as Word); it changes from insert mode to overwrite mode. When this check box is not selected, the INSERT key only switches to insert mode; a new screen from the host resets the mode to overwrite mode.

Autoskip to next unprotected field

Not available for sessions of type Telnet VT.

When the last possible character has been entered in an unprotected field, further behavior of the cursor depends on the field attribute and this check box. When this check box is selected, the cursor jumps to the next unprotected field. When this check box is not selected, the cursor jumps to the next position or jumps to the next unprotected field if the field contains the skip attribute.

Enable right to left support

Only available for sessions of type Telnet TN3270.

When this check box is selected, right-to-left mode is supported in terminal emulation.

Prompt user for logon credentials

Only available for sessions of type Natural UNIX.

When this check box is selected and a session is opened with the Terminal Viewer, a logon dialog box appears prompting for user name and password for the UNIX or OpenVMS host before the session is opened.

The logon is processed as described in the section *Using the Viewers with Natural on UNIX and OpenVMS Hosts* in the *Installation and Configuration* documentation.

Data Transfer Properties

These properties are valid for all session types.

	Data Transfer Property	Value
	Keep trailing blanks at the end of downloaded records:	☐ Active
	Send a form feed to the printer after download:	☐ Active
	Form feed handling in NCD upload:	☐ Active
	Ignore leading form feed in download report:	☐ Active

Keep trailing blanks at the end of downloaded records

Normally, Entire Screen Builder does not write to disk trailing blanks at the end of downloaded records. However, when this check box is selected, the trailing blanks are also written to disk, thus creating fixed length records in NCD format.

Send a form feed to the printer after download

Normally, Entire Screen Builder routes downloaded data to the printer transparently. However, when this check box is selected, a form feed is sent to the printer at the end of the download.

Form feed handling in NCD upload

When you upload an ASCII file containing the ASCII form feed character (x’12’) from the PC to the host, this ASCII character is converted to an EBCDIC space character (x’40).

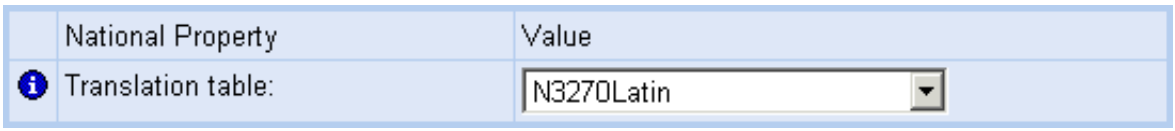
To convert the ASCII form feed character to something other than a space on the host, you must mark this check box and edit the translation table for the appropriate communication method. The defined form feed character will then be used. The translation tables can be found in the *tables* folder of Entire Screen Builder.

Ignore leading form feed in download report

When you are downloading a report, an empty page preceedes the report. However, when this check box is selected, an empty page is not generated.

National Properties

This property does not apply to the session type Natural UNIX.



Translation table

Select the translation table to be used for host communication from the drop-down list box.

A translation table defines the translation of characters from the codepage that is used on the host to the codepage to which the PC is set up (Windows ANSI), and vice versa.

The names of the translation tables that are provided in the drop-down list box are the names of the translation table files in the *tables* folder of Entire Screen Builder. Each name of a translation table file supplied with Entire Screen Builder indicates the type of communication. Several names are followed by a country or region indicator (for example, "us", "gr" or "Latin"). When a country or region indicator is not provided, this is a default table which does no translation because translation is not required. Translation tables are identified by the extension "tra". A comment in the top section of each file gives information about its contents. All translation tables supplied with Entire Screen Builder, except *N3270_rus.tra*, use the standard encoding "windows-1252" for the PC codepage.

Important:
The PC codepage used for the translation tables determines the character encoding for XML and HTML files and for the XML Version.

In a translation table there are actually two tables: one for sending and one for receiving. For example, the file *N3270Latin.tra* contains the two Latin (Western European) translation tables - ASC2(Ansi)EBCDICLatin and EBCDICLatin(Ansi)2ASC - which can be used for the communication method Telnet TN3270. The definitions for each table are located directly below the name of the corresponding table.

The following conventions are used for the table names in the translation table files:

- **ASC2*hostcodepage-and-language***
  Used to translate data from the PC codepage to the host codepage.
- ***hostcodepage-and-language*2ASC**
  Used to translate data from host codepage to the PC codepage.

If you want to create your own translation tables, *hostcodepage* and *language* should be meaningful names. "ASC2" or "2ASC" as part of the name is interpreted as a keyword. The first translation table in each file must be the ASC2*hostcodepage-and-language* table.

Default translation tables for the different session types (in the above drop-down lost box):

Session Type	Translation Table
BS2000	Bs2000_us
Telnet TN3270	N3270Latin
Telnet VT	Vtxxx